

REMARKS

Claims 1-21 are pending in this application. Claims 1, 11 and 21 were amended in this response. No new matter has been introduced as a result of the amendments.

Claims 1-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Damgaard et al.* (US Patent No. 6,670,849) in view of 3GPP TS 45.005 v5.20, (hereafter “3GPP”). For the following reasons, Applicant respectfully traverses the Examiner’s rejection and respectfully requests withdrawal of same. Favorable reconsideration is respectfully requested.

Specifically, none of the cited art, alone or in combination teach “time masking parts that selects at least one time window located at a point where tail symbols of a first data burst are sent, wherein said time window has a predetermined length, and wherein the non-constant-envelope modulation is made more constant,” and “a controller, responsive to the comparator, that adjusts a control signal of the amplifier after a predetermined time delay, occurring after the time window selected by the time masking parts has lapsed, if the comparison result indicates that the first voltage deviates more than a predefined threshold value from the reference voltage” as recited in claim 1 and similarly recited in claims 11 and 21.

Under the present claims, a power control system is recited for a radio transmitter transmitting a radio signal modulated with non-constant envelope modulation, which includes an amplifier that amplifies a signal comprising data bursts and parts for obtaining a first voltage corresponding to a power of the amplified signal.

Damgaard discloses a system for closed loop power control using a linear or non-linear power amplifier (see Abstract). Under the system, a first modulated signal is supplied to a power amplifier, where a portion of an output of the power amplifier is detected in a closed power control feedback loop, and the output power of the power amplifier is adjusted based upon the detected portion of the output of the power amplifier and a reference signal. A second modulated signal is then injected into the feedback loop using a variable gain element (col. 3, lines 1-9). *Damgaard* teaches that the injected second modulated signal is an inverted version of a desired amplitude modulated (AM) signal, in order to make the AM component invisible in the feedback loop, and the feedback loop will therefore act only upon the average power of the

signal to allow the closed power control feedback loop to provide closed loop power control in a system in which both a phase modulated (PM) component and an AM component are supplied as input to a power amplifier (col. 3, lines 22-32; col. 8, lines 25-33).

In contrast to the present claims, *Damgaard* does teach or suggest a power control system having corresponding parts for obtaining a first voltage corresponding to a power of the amplified signal. In col. 5, lines 38-41, *Damgaard* only outlines that the power amplifier amplifies the modulated signal to an appropriate power level. Also, *Damgaard* does also not teach measuring the power level and determining a corresponding voltage based on a current measurement. The assertion that a voltage is known if the power is known is not correct.

Damgaard is also silent regarding the feature which recites that, through time masking, at least one time window is selected which has a predetermined length and is located at a point where tail symbols of a first data burst are sent, wherein the non-constant-envelope modulation is made more constant. *Damgaard* is wholly silent regarding such a configuration since the principle of operation is premised on making the AM component invisible in the feedback loop by injecting a second modulated signal which is an inverted version of the desired AM signal. By using time windows under the present claims, for example, a window may be selected when the radio signal has no AM component for measuring the first voltage corresponding to the power of the amplified signal. Also, *Damgaard* fails to teach or suggest adjusting a control signal of the amplifier after a predetermined time delay occurs after the time window has lapsed.

Under the amended claims, a controller responsive to the comparator is recited that adjusts a control signal of the amplifier after a predetermined time delay, occurring after the time window selected by the time masking parts has lapsed, if the comparison result indicates that the first voltage deviates more than a predefined threshold value from the reference voltage. It is clear that *Damgaard* cannot teach this feature, since the document is completely silent on time masking parts and therefore also on using special time windows for measuring the first voltage and for adjusting a control signal of the amplifier after a predetermined time delay occurring after the time window selected by the time masking parts has lapsed.

Regarding the 3GPP document, the reference shows in figure B.2 in Annex B a function of the transmitted power level versus time for normal duration bursts at 8-PSK modulation. This figure bears some similarity to FIG. 4 of the present application. However, although FIG. B.2 is

titled as "time mask", it is quite clear that this figure does not illustrate a time mask in the manner recited in the present claims. According to section 4.5.1 of Annex B, a template is disclosed (i.e. a standardized format for the output power relative to time when sending a burst), where, in order to generate such a burst, special circuitry is needed. However, the present claims are not directed at generating a burst, but instead recites evaluating the burst using the time windows (selected by the time masking parts), where tail symbols of the data burst are sent. Thus, Annex B of the 3GPP document clearly does not teach time masking parts that select at least one time window located at a point that tail symbols of a first data burst are sent, wherein the time window has a predetermined length and wherein the non-constant envelope modulation is made more constant.

Furthermore, there is no teaching, suggestion or motivation to one having ordinary skill in the art to combine the above documents in the manner suggested in the office action. In making a determination that an invention is obvious, the Patent Office has the initial burden of establishing a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). "If the examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent." *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992).

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). When the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986). (see MPEP 2142).

Further, the Federal Circuit has held that it is “impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.” *In re Fritch*, 23 U.S.P.Q.2d 1780, 1784 (Fed. Cir. 1992). “One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention” *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988).

Moreover, the Federal Circuit has held that “obvious to try” is not the proper standard under 35 U.S.C. §103. *Ex parte Goldgaber*, 41 U.S.P.Q.2d 1172, 1177 (Fed. Cir. 1996). “An-obvious-to-try situation exists when a general disclosure may pique the scientist curiosity, such that further investigation might be done as a result of the disclosure, but the disclosure itself does not contain a sufficient teaching of how to obtain the desired result, or that the claim result would be obtained if certain directions were pursued.” *In re Eli Lilly and Co.*, 14 U.S.P.Q.2d 1741, 1743 (Fed. Cir. 1990).

It is entirely unclear to the Applicant how the 3GPP document is relevant to the teaching of *Damgaard*. As discussed above, the generation of a burst has no bearing on the operation of *Damgaard*. Furthermore, the disclosure in *Damgaard* is not directed to GSM, which employs GSMK for PM signals (col. 1, lines 24-28), but goes to GDM-EDGE, which employs both AM and PM signals (col. 2, lines 35-39). As explained above, *Damgaard* operates by making the AM component invisible in the feedback loop by injecting a second modulated signal which is an inverted version of the desired AM signal. It is not understood how the burst generating time mask of 3GPP could even be implemented in the configuration of *Damgaard*.

For at least these reasons, Applicant submits the rejection is improper and should be withdrawn. As such, Applicant respectfully submits that all of the claims of the present application, as amended, are patentable, and respectfully requests that a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the office is hereby authorized to deduct said fees from Deposit Account No.: 02-1818. If such a deduction is made, please indicate the attorney docket number (0112740-868) on the account statement.

Respectfully submitted,

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